APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,627	07/16/2001	Ullas Gargi	10006286-1	2970

7590   08/18/2003

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EXAMINER
WANG, JIN CHENG

ART UNIT	PAPER NUMBER
2672	3

DATE MAILED: 08/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-20_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-20_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Notice of Change in Art Unit

1.   The Group and/or Art Unit location of your application in the USPTO has changed. To

aid in correlating any papers for this application, all further correspondence regarding this

application should be directed to Group Art Unit 2672.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-8, 11-14, 16-19 are rejected under 35 U.S.C. 102(e) as being anticipated by

Moghaddam et al. U.S. Patent No. 6,584,221 (hereinafter Moghaddam).

4.   Claim 1:

Moghaddam teaches a method of visualizing and retrieving a data file (e.g., the abstract;

figures 1, 2 and 7; column 1, lines 55-67; column 2, lines 1-26) comprising:

Displaying a plurality of image representing corresponding data files on a display device

using a first distance metric between each data file (figures 2, 4, 6 and 7; column column 2, lines

45-67; column 3, lines 1-67; column 4, lines 1-67; column 5, lines 1-67; column 6, lines 1-28);

Redisplaying a portion of the images on the display device using a refined distance metric

(figures 2, 4, 6 and 7; column 3, lines 19-36; column 4, lines 18-30; column 3, lines 50-62;

column 5, lines 1-5; column 5, lines 52-67; column 6, lines 1-3); and

Performing at least one of retrieving, marking, and selecting at least one desired data file

(figures 2, 4, 6 and 7; column 3, lines 19-36; column 4, lines 18-30; column 3, lines 50-62;

column 5, lines 1-5; column 5, lines 52-67; column 6, lines 1-3).

Claim 2:

The claim 2 encompasses the same scope of invention as that of claim 1 except additional

claimed limitation of repeating the redisplaying step until a desired data file is identifiable.

However, Moghaddam further discloses the claimed limitation of repeating the redisplaying step

until a desired data file is identifiable (figures 2, 4, 6 and 7; column 3, lines 19-36; column 4,

lines 18-30; column 3, lines 50-62; column 5, lines 1-5; column 5, lines 52-67; column 6, lines 1-

3).

Claim 3:

The claim 3 encompasses the same scope of invention as that of claim 1 except additional

claimed limitation of computing a feature vector for each data file and calculating the first

distance metric between each data file using a first subset of data contained in the feature vector.

However, Moghaddam further discloses the claimed limitation of computing a feature vector for

each data file (column 3, lines 2-10; column 3, lines 25-46; column 4, lines 45-60; column 5,

lines 40-60) and calculating the first distance metric between each data file using a first subset of

data contained in the feature vector (figures 2, 4, 6 and 7; column 3, lines 19-36; column 4, lines

18-30; column 3, lines 50-62; column 5, lines 1-5; column 5, lines 52-67; column 6, lines 1-3).

Claim 4:

The claim 4 encompasses the same scope of invention as that of claim 3 except additional

claimed limitation of calculating a second distance metric between each data file using a second

subset of data contained in the feature vector which is greater than the first subset. However,

Moghaddam further discloses the claimed limitation of calculating a second distance metric

between each data file using a second subset of data contained in the feature vector which is

greater than the first subset (e.g., column 3, lines 19-25; column 3, lines 53-62; column 4, lines

18-30; column 4, lines 61-67; column 5, lines 1-5).

Claim 5:

The claim 5 encompasses the same scope of invention as that of claim 4 except additional

claimed limitation of computing the feature vector for each data file before starting the method;

storing the feature vector for each data file; and accessing the feature vector for each data file.

However, Moghaddam further discloses the claimed limitation of computing the feature vector

for each data file before starting the method; storing the feature vector for each data file; and

accessing the feature vector for each data file (e.g., column 3, lines 25-62).

Claim 6:

The claim 6 encompasses the same scope of invention as that of claim 4 except additional

claimed limitation of each feature vector having a length at least eight.

However, Moghaddam further discloses the claimed limitation of each feature vector having a

length at least eight (e.g., column 4, lines 1-8).

Claim 7:

The claim 7 encompasses the same scope of invention as that of claim 4 except additional claimed limitation of the feature vector including at least one of a color feature and a texture feature. However, Moghaddam further discloses the claimed limitation of the feature vector including at least one of a color feature and a texture feature (e.g., column 3, lines 25-62).

Claim 8:

The claim 8 encompasses the same scope of invention as that of claim 4 except additional claimed limitation of the feature vector including at least one of a color histogram, color moment, color coherence histogram, Multiresolution Simultaneous Augoregressive (MRSAR) Model, coarseness, and directionality. However, Moghaddam further discloses the claimed limitation of the feature vector including at least one of a color histogram, color moment, color coherence histogram, Multiresolution Simultaneous Augoregressive (MRSAR) Model, coarseness, and directionality (e.g., column 3, lines 2-10; column 3, lines 64-67; column 4, lines 1-8).

Claim 9:

The claim 9 encompasses the same scope of invention as that of claim 4 except additional claimed limitation of the first distance metrics being mapped into an N-dimensional space suing FastMap for displaying and wherein the refined distance metrics being mapped into an N-dimensional space using FastMap for redisplaying. However, Moghaddam further discloses the claimed limitation of the first distance metrics being mapped into an N-dimensional space suing FastMap for displaying and wherein the refined distance metrics being mapped into an N-dimensional space using FastMap for redisplaying (e.g., column 3, lines 2-10; column 3, lines 64-67; column 4, lines 1-8).

Claim 11:

The claim 11 encompasses the same scope of invention as that of claim 1 except

additional claimed limitation of the data files being image files. However, Moghaddam further

discloses the claimed limitation of the data files being image files (e.g., figures 6-7; column 45-

60).

Claim 12:

The claim 12 encompasses the same scope of invention as that of claim 1 except

additional claimed limitation of the data files being video files. However, Moghaddam further

discloses the claimed limitation of the data files being video files (e.g., column 1, lines 55-67;

column 2, lines 1-26).

Claim 13:

The claim 13 encompasses the same scope of invention as that of claim 1 except

additional claimed limitation of establishing a fixed scale that spans a maximum distance

between the plurality of data files; and indicating a relative position on the fixed scale for the

redisplay of the portion of the image, thereby providing the user with a reference frame.

However, Moghaddam further discloses the claimed limitation of establishing a fixed scale that

spans a maximum distance between the plurality of data files; and indicating a relative position

on the fixed scale for the redisplay of the portion of the image, thereby providing the user with a

reference frame (e.g., figures 6-7; column 5, lines 40-65).

Claim 14:

The claim 14 encompasses the same scope of invention as that of claim 1 except

additional claimed limitation of the fixed scale being at least one of a linear scale, a logarithmic

scale, and a hyperbolic scale. However, Moghaddam further discloses the claimed limitation of

the fixed scale being at least one of a linear scale, a logarithmic scale, and a hyperbolic scale

(e.g., figures 6-7; column 5, lines 40-65).

Claim 16:

The claim 16 encompasses the same scope of invention as that of claim 1 except

additional claimed limitation of the portion of the images redisplayed being graphically selected

by the user. However, Moghaddam further discloses the claimed limitation of the portion of the

images redisplayed being graphically selected by the user (e.g., figures 2, 4, 6-7; column 2, lines

48-63).

5.   Claim 17:

Moghaddam teaches a method of interactively retrieving a data file from a set of data

files in real time (e.g., the abstract; figures 1, 2 and 7; column 1, lines 55-67; column 2, lines 1-

26) comprising:

Displaying a plurality of images, each image corresponding to a data file, on a display

device using a first distance metric between each data (figures 2, 4, 6 and 7; column column 2,

lines 45-67; column 3, lines 1-67; column 4, lines 1-67; column 5, lines 1-67; column 6, lines 1-

28);

Interactively selecting, by a user, a portion of the images (figures 2, 4, 6-7; column 2,

lines 48-65);

Redisplaying the portion of the images in real time on the display device using a refined

distance metric (figures 2, 4, 6 and 7; column 3, lines 19-36; column 4, lines 18-30; column 3,

lines 50-62; column 5, lines 1-5; column 5, lines 52-67; column 6, lines 1-3); and

Retrieving a desired data file (figures 2, 4, 6 and 7; column 3, lines 19-36; column 4,

lines 18-30; column 3, lines 50-62; column 5, lines 1-5; column 5, lines 52-67; column 6, lines 1-

3).

Claim 18:

The claim 18 encompasses the same scope of invention as that of claim 17 except

additional claimed limitation of computing a feature vector for each data file and calculating the

first distance metric between each data file using a first subset of data contained in the feature

vector. However, Moghaddam further discloses the claimed limitation of computing a feature

vector for each data file (column 3, lines 2-10; column 3, lines 25-46; column 4, lines 45-60;

column 5, lines 40-60) and calculating the first distance metric between each data file using a

first subset of data contained in the feature vector (figures 2, 4, 6 and 7; column 3, lines 19-36;

column 4, lines 18-30; column 3, lines 50-62; column 5, lines 1-5; column 5, lines 52-67; column

6, lines 1-3).

Claim 19:

The claim 19 encompasses the same scope of invention as that of claim 18 except

additional claimed limitation of calculating a second distance metric between each data file using

a second subset of data contained in the feature vector which is greater than the first subset.

However, Moghaddam further discloses the claimed limitation of calculating a second distance

metric between each data file using a second subset of data contained in the feature vector which

is greater than the first subset (e.g., column 3, lines 19-25; column 3, lines 53-62; column 4, lines 18-30; column 4, lines 61-67; column 5, lines 1-5).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.   Claim 9, 10, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moghaddam et al. U.S. Patent No. 6,584,221 (hereinafter Moghaddam) as applied to claims 1 and 17 above, and further in view of Jain U.S. Patent No. 6,121,969 (hereinafter Jain).

8.   Claims 9, 10, and 20:

(1) Moghaddam teaches a method of visualizing and retrieving a data file from a set of data files.

(2) Moghaddam is silent on the claimed limitation that the first distance metrics are mapped into an N-dimensional space using FastMap for displaying and the refined distance metrics are mapped into an N-dimensional space using FastMap for redisplaying.

(3) Jain discloses the claimed limitation that the first distance metrics are mapped into an N-dimensional space using FastMap for displaying and the refined distance metrics are mapped into an N-dimensional space using FastMap for redisplaying (e.g., column 27, lines 30-40; column 25, lines 35-67; column 26, lines 1-57).

(4) It would have been obvious to one of ordinary skill in the art to have incorporated the

Jain's mapping method into Moghaddam's method of visualizing and retrieving an image from

the database because Moghaddam suggests a 3D histogram of texture space and the vector of

distance metrics displayed in two or three-dimensional Euclidean space (Moghaddam column 3,

lines 64-67; column 4, lines 1-8).

(5) One having the ordinary skill in the art would have been motivated to do this because

it would have advantageously provided the display of metric properties for representation in the

display space (Jain column 25, lines 35-67; column 26, lines 1-57).

9.   Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moghaddam et

al. U.S. Patent No. 6,584,221 (hereinafter Moghaddam) as applied to claims 1 and 17 above, and

further in view of Bates et al. U.S. Patent No. 5,528,259 (hereinafter Bates).

10.   Claim 15:

(1) Moghaddam teaches a method of visualizing and retrieving a data file from a set of

data files.

(2) Moghaddam is silent on the claimed limitation of providing a display depth indication

that represents an amount of overlapping of images on the display and scrolling to view images

that were previously not viewable due to overlapping of the images.

(3) Bates discloses the claimed limitation of providing a display depth indication that

represents an amount of overlapping of images on the display and scrolling to view images that

were previously not viewable due to overlapping of the images (e.g., Bates figures 4A-4C;

column 4, lines 39-56; column 5, lines 25-45).

(4) It would have been obvious to one of ordinary skill in the art to have incorporated the Bates' scrolling of overlapping images and selecting of an alternate layer into Moghaddam's method of visualizing and retrieving an image from the database because Moghaddam suggests a user interface selection of a portion of image and image layers (Moghaddam figures 1-7).

(5) One having the ordinary skill in the art would have been motivated to do this because it would have advantageously provided a pictorial representation of one of selected multiple layers of image data in a multi-dimensional scrolling method of manipulating or selecting image layers (e.g., Bates figures 4A-4C; column 4, lines 39-56; column 5, lines 25-45).

Conclusion

11.　　Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jin-Cheng Wang whose telephone number is (703) 605-1213. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on (703) 305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-6606 for regular communications and (703) 308-6606 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 395-3900.

jcw
July 31, 2003
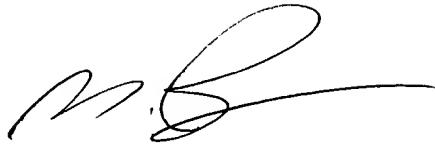
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